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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,501	06/14/2001	David M. Alpern	oracle01.013	7766
25247	7590	01/10/2005		
GORDON E NELSON PATENT ATTORNEY, PC 57 CENTRAL ST PO BOX 782 ROWLEY, MA 01969			EXAMINER LEROUX, ETIENNE PIERRE	
			ART UNIT 2161	PAPER NUMBER
DATE MAILED: 01/10/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p>09/881,501</p>	<p><b>Applicant(s)</b></p> <p>ALPERN ET AL.</p>	
	<p><b>Examiner</b></p> <p>Etienne P LeRoux</p>	<p><b>Art Unit</b></p> <p>2161</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u>1/6/2005</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                               | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>9/15/04</u> . | 6) <input type="checkbox"/> Other:  |

***Claim Status***

Claims 5-24 are pending; claims 1-4 having been cancelled. Claims 5-24 are rejected as detailed below.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 5 recites "determining that the request is preferably executed at least in part in another database system of the plurality." The specification does not include a clear and concise description of the manner in which the computer implemented method of the invention determines a preferable process of execution.

Claim 15 includes language similar to claim 5 and is rejected for the same reasons as claim 5.

Claims 6-14 and 16-24 are rejected for being dependent from a rejected base claim.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 5-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites “determining that the request is preferably executed at least in part in another database system of the plurality.” The metes and bounds of the invention are difficult to determine because it is unclear how many “executions” are being claimed. It is unclear how many “executions” in addition to the preferable execution are included in the scope of instant invention. Furthermore, it is unclear whether the request in some instances is not executed entirely in another database system. For purposes of this examination, examiner assumes that any prior art which discloses searching multiple databases reads on above claim limitation.

Claim 6 recites “the step of determining whether the request is preferably executed in the other database system determines that an object required for execution of the request is lacking in the database system.” There is insufficient antecedent basis for “the database system.” Furthermore, the scope of the invention is difficult to determine because it is not clear how the request can be executed when the object is lacking from the [distributed] database system.

Claim 7 recites “placing the request in a form required for execution in the database system; modifying the form when it has been determined that the request is preferably executed in part in another database system” The scope of the invention is difficult to determine because it is unclear how “another database system” in claim 7 relates to “another database system” in claim 5.

Claim 15 includes language similar to claim 5 and is rejected for the same reasons as claim 5.

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Claims 8-14 and 16-24 are rejected for being dependent from a rejected bas claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 5-7, 10-16 and 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat No. 6,243,715 issued to Bogantz et al (hereafter Bogantz).

Claims 5 and 15:

Bogantz discloses:

- determining that the request [Fig 2, 106] is preferably executed at least in part in another database system of the plurality [col 6, lines 30-41, the database querying system 106 determines the replicated database to which it sends the data request/query]
- redirecting the execution of at least the part of the request to the other database system [col 6, lines 60-65, querying process is halted and another database is queried].

Claims 6 and 19:

Bogantz discloses wherein the request includes one or more specifiers referring to objects belonging to a plurality thereof in the distributed database system; and the step of determining whether the request is preferably executed in the other database system determines that an object required for execution of the request is lacking in the database system [col 6, lines 42-50]

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Claims 7 and 16::

Bogantz discloses the steps of placing the request in a form required for execution in the database system; modifying the form when it has been determined that the request is preferably executed at least in part in another database system; and in the step of redirecting, the modified form is redirected [query from the database querying system is modified by pointer data, col 7, lines 35-45].

Claims 10 and 20:

Bogantz discloses the data storage device contains code which when executed by a processor performs the method set forth in claim 5/15 [Fig 3, 110].

Claims 11 and 21:

Bogantz discloses the data storage device contains code which when executed by a processor performs the method set forth in claim 6/16 [Fig 3, 110].

Claims 12 and 22:

Bogantz discloses the data storage device contains code which when executed by a processor performs the method set forth in claim 7/17 [Fig 3, 110]

Claims 13 and 23:

Bogantz discloses the data storage device contains code which when executed by a processor performs the method set forth in claim 8/18 [Fig 3, 110]

Claims 14 and 24:

Bogantz discloses the data storage device contains code which when executed by a processor performs the method set forth in claim 9/19 [Fig 3, 110]

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogantz in view of Pub No US 2002/0065919 to Taylor et al (hereafter Taylor).

Claims 8 and 17:

Bogantz discloses the elements of the claimed invention as noted above in claim 5 and furthermore the form required for execution is a cursor and in the step of modifying the form the cursor is marked for redirection [col 6, lines 50-55] but Bogantz fails to disclose the request includes a SQL statement. Taylor discloses a SQL statement [paragraph 171]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bogantz to include the request includes a SQL statement as taught by Taylor for the purpose of generating the database by one of a number of commercially available database applications, e.g. Oracle. [paragraph 171].

Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogantz in view of US Pat No 5,806,074 to Souder et al (hereafter Souder).

Claims 9 and 18:

Bogantz discloses the essential elements of the invention as noted above in claims 5 and 7 except for wherein the request includes a call to a procedure object, and in the step of modifying the form, the call is rewritten in the form required for execution as a remote procedure call directed to the other database system. Souder discloses wherein the request includes a call to a procedure object, and in the step of modifying the form, the call is rewritten in the form required for execution as a remote procedure call directed to the other database system [col 2, lines 51-53]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bogantz to include wherein the request includes a call to a procedure object, and in the step of modifying the form, the call is rewritten in the form required for execution as a remote procedure call directed to the other database system as taught by Souder for the purpose of queuing a request in the local system [col 2, lines 50-63].

### ***Response to Arguments***

Applicant's arguments filed 9/15/2004 have been considered and not found persuasive. However, in order to advance prosecution by avoiding unnecessary arguments over what does, and what does not comprise a database system, supra new art rejection is provided. As best examiner is able to ascertain, above new art rejection more accurately reads on the claimed invention. Nevertheless, it is expedient to consider the essence of applicant's arguments presented in previous responses by applicant.

### **Applicant Argues:**



Applicant states in page 2 “Applicants responded to the Office action of 3/15/04 on 3/29/04 by traversing the rejections. Examiner **refused** to consider the traversal and Applicants filed a Request for Continued Examination on 4/30/04.”

**Examiner Responds:**

Examiner wishes to place on record that examiner’s response in the previously issued Advisory Action was in accordance with procedures of this Office. Applicant has no reason to conclude that issuing the above Advisory Action was tantamount to “refusing to consider.” Examiner called applicant on January 4, 2005 and expressed the above in a telephone conversation. Furthermore, turning to the essence of applicant’s arguments filed 9/15/2004, it is noted that applicant continues to reiterate the same arguments as considered in the Advisory Action. Applicant continues to state without any supporting reasoning that the cited prior art does not disclose “another database system,” and/or “the other database system” and/or “a distributed database system.” In this regard, it is noted that MPEP § 2106 requires Office personnel to give claims their broadest reasonable interpretation in light of the supporting disclosure. Consider applicant’s specification where under the heading Detailed Description on page 7, line 26, the following definition is provided:

***A distributed database is a set of databases that appear to an application as an single database.***

Examiner concludes the cited prior art in the previous Office action clearly complies with above definition. Therefore, examiner maintains comments provided in the Advisory Action were justified. However, to obviate applicant’s response that once again examiner has refused to consider applicant’s comments, examiner provides supra new art rejection which includes multiple references to the word “database” which hopefully will convince applicant that the prior

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art reads on the claimed invention. It does seem strange that the previous rejection of instant invention in view of Whatley is traversed by applicant because Whatley's queryable cache allegedly does not read on the claimed invention. Examiner notes that the title of instant invention is "Redirection of misses in Queryable Caches."

Examiner states that applicant's claims once again have been **carefully considered**. Examiner has consulted senior members of the 2161 database art unit and it is our conclusion that the claims are not in condition for allowance. As discussed in the telephone interview, examiner advises applicant to prepare instant application for appeal because continued prosecution of such broad and general claim limitations such as "another database system" and "the other database system" are not sufficient basis for allowing instant application for invention.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Etienne LeRoux

1/5/2005

  
**SAFET METJAHIC**  
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